WHAT IS CLAIMED:

1. A method of producing heat-insulating composite paper containers comprising the steps of:

A) providing fabricated containers, each comprised of a side body and a bottom panel, at least a portion of each container formed of paper provided on an area thereof with a foamable material to define a foamable area of the container;

B) conveying the fabricated containers through an oven while supported on a conveyor, to heat the fabricated containers at a temperature and time period sufficient to cause the foamable material to foam under the action of moisture released from the paper; and

C) supporting each of the fabricated containers on the conveyor during step B, in a manner preventing appreciable heat from being drawn from the foamable area by the conveyor, while preventing a fabricated container from making contact with any other fabricated container within the oven.

2. The method according to claim 1 wherein step C comprises supporting the fabricated containers on respective holders of the conveyor while causing the containers to freely wobble with respect to their respective holders.

3. A method of producing heat-insulating composite paper containers comprising the steps of:

A) providing fabricated containers, wherein at least one surface thereof is provided with a foamable material;

B) conveying the fabricated containers through an oven while supported on a conveyor, to heat the fabricated containers at a temperature and time period sufficient to cause the foamable material to foam under the action of moisture released from the fabricated container; and

C) supporting each of the fabricated containers on the conveyor during step B, by a respective holder of the conveyor, the holder supporting the respective fabricated container in a loose manner, enabling the fabricated container to freely wobble relative to its holder under the influence of conveyor vibration and air currents occurring within the oven, while preventing the fabricated container from making contact with any other fabricated container within the oven.

4. The method according to claim 3 wherein step C includes supporting each container in a substantially vertical orientation.

5. The method according to claim 3 wherein step C further comprises permitting the fabricated containers to freely wobble relative to their respective holders in a manner preventing each of the holders from making continuous contact with any given point on the respective fabricated container for an entire residence period of the fabricated container in the oven.

6. The method according to claim 3 wherein step C further comprises supporting each of the fabricated containers on its respective holder such that an upstanding portion of each holder extends through a mouth of a respective fabricated container.

7. The method according to claim 6 wherein step C further comprises supporting each of the fabricated containers in an inverted state, with the upstanding portion of the holder extending upwardly through the mouth of the fabricated container.

8. The method according to claim 7 wherein each fabricated container comprises a bottom panel and step C further comprises supporting the bottom panel of each of the fabricated containers on an upper end of the upstanding portion of the holder.

9. The method according to claim 7 wherein step C further comprises restricting horizontal movements of the mouth of each of the fabricated containers by a lower region of the upstanding portion which is situated farther horizontally outwardly than an upper end of the upstanding portion.

10. The method according to claim 7 wherein step C further comprises supporting a rim of the mouth of each of the fabricated containers on a generally horizontal shoulder portion of the respective holder.

11. The method according to claim 3 wherein step A further comprises providing an inner surface of each container with a non-foamable material.

12. The method according to claim 11 wherein step A further comprises providing an inner surface of a bottom panel of each fabricated container with a non-foamable material.

13. The method according to claim 3 wherein step B further comprises conveying the fabricated containers in single file, along a serpentine path through the oven.

14. An apparatus for producing heat-insulating composite paper containers comprising:

an oven producing currents of heated air;

a conveyor for conveying a plurality of fabricated containers through the oven to cause a foamable material to foam on a surface of each fabricated container, the conveyor including a plurality of spaced apart holders for supporting respective fabricated containers, each holder configured for supporting its respective fabricated container in a loose manner, enabling the fabricated container to freely wobble relative to its holder under the influence of conveyor vibration and air currents within the oven, while preventing the fabricated container from making contact with any other fabricated container within the oven.

15. The apparatus according to claim 14 wherein each holder supports its respective container in a substantially vertical orientation.

16. The apparatus according to claim 15 wherein each of the holders includes an upstanding portion extending through a mouth of a respective fabricated container.

17. The apparatus according to claim 16 wherein each holder supports its respective fabricated container in an inverted state, with the upstanding portion extending upwardly through the mouth of the fabricated container.

18. The apparatus according to claim 17 wherein a bottom panel of each fabricated container is supported directly on an upper end of a respective upright portion.

19. The apparatus according to claim 17 wherein each holder further includes a generally horizontal shoulder portion located below an upper end of each upright portion for directly supporting a rim of the mouth of a respective fabricated container.

20. The apparatus according to claim 19 wherein the upright portion includes an upper end spaced below the bottom panel of its associated fabricated container when the mouth of the fabricated container rests upon the shoulder portion.

21. The apparatus according to claim 17 wherein each of the upstanding portions includes a plurality of metal rods arranged to contact an inner surface of the container at locations spaced apart circumferentially with reference to a vertical center axis of the upright portion.

22. The apparatus according to claim 21 wherein each of the rods has upper and lower portions, the lower portion of each rod situated horizontally outwardly farther than the upper portion.

23. The apparatus according to claim 18 wherein the upper end of each upright portion comprises a metal disk, the upright portion further comprising a plurality of metal rods extending downwardly from the disk at an inclination relative to vertical, such that the rods are divergent in a downward direction.

3 24. The apparatus according to claim 14 wherein the holders are arranged in single file on the conveyor, and the conveyor extends through the oven along a serpentine path.